

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Listing of the Claims

Please CANCEL claim 8, AMEND claims 1, 2, 4, 7 and 12-13 in accordance with the following:

1. (CURRENTLY AMENDED) A virtualized-information management apparatus for managing corresponding information between real ~~storage areas~~ volumes of a plurality of storages connected to a network and a virtual ~~storage area~~ volume built by virtually integrating the real ~~storage areas~~ volumes, comprising:

a transmission/reception unit that transmits/receives, between the virtualized-information management apparatus and another virtualized-information management apparatus connected to another network, information on updating the corresponding information; ~~and~~

an updating unit that updates the corresponding information based on the information received; and

a building unit that accepts specifying of a necessary capacity of the virtual volume, selects the real volumes connected to networks based on a predetermined priority sequence of the networks until a total free capacity of the real volumes selected reaches the necessary capacity, and builds a new virtual volume by virtually integrating the real volumes selected; wherein

the updating unit further updates the corresponding information based on corresponding information of the new virtual volume.

2. (CURRENTLY AMENDED) The virtualized-information management apparatus according to claim 1, further comprising:

a searching unit that, when receiving a request for writing data into or reading data from the virtual ~~storage area~~ volume, searches for a virtualized-information management apparatus connected to a network where the virtual ~~storage area~~ volume is built; and

a writing/reading unit that, when the virtualized-information management apparatus

searched is the virtualized-information management apparatus itself, writes data into or reads data from the real ~~storage areas~~ volumes corresponding to the virtual ~~storage area~~ volume based on the corresponding information updated.

3. (ORIGINAL) The virtualized-information management apparatus according to claim 2, wherein

the writing/reading unit includes

a capsulating unit that capsulates the information on updating the corresponding information using an internet protocol packet; and

a decapsulating unit that decapsulates capsulated information,

when the network is connected to the another network via internet protocol network, the writing/reading unit capsulates the information about the updating of the corresponding information, and transmits the information capsulated, and

when receiving the information capsulated, the writing/reading unit decapsulates the information capsulated.

4. (CURRENTLY AMENDED) The virtualized-information management apparatus according to claim 2, wherein when the writing/reading unit receives the request for reading data from the another virtualized-information management apparatus, it reads the data from the real ~~storage areas~~ volumes corresponding to the virtual ~~storage area~~ volume based on the corresponding information updated, and transmits the data read to the another virtualized-information management apparatus.

5. (ORIGINAL) The virtualized-information management apparatus according to claim 2, wherein when the virtualized-information management apparatus searched is the another virtualized-information management apparatus, the writing/reading unit transfers the request for writing data or reading data to the another virtualized-information management apparatus.

6. (ORIGINAL) The virtualized-information management apparatus according to claim 5, further comprising:

a data cache unit that, when receiving data transmitted from the another virtualized-information management apparatus in response to the request for reading data transferred, stores the data, and when receiving another request for reading the data, outputs the data stored.

7. (CURRENTLY AMENDED) The virtualized-information management apparatus according to claim 2, further comprising:

a copying unit that copies data stored in one real ~~storage-area~~volume into other real ~~storage-area~~volume, wherein

when receiving the request for writing or reading data stored in the one real ~~storage-area~~volume, the writing/reading unit switches a data writing destination or a data reading destination to the other real ~~storage-area~~volume based on an access load on the one real ~~storage-area~~volume.

8. (CANCELLED)

9. (CURRENTLY AMENDED) The virtualized-information management apparatus according to claim 8~~1~~, wherein

the writing/reading unit includes

a capsulating unit that capsulates the information on updating the corresponding information using an internet protocol packet; and

a decapsulating unit that decapsulates capsulated information,

when the network is connected to the another network via internet protocol network, the writing/reading unit capsulates the information about the updating of the corresponding information, and transmits the information capsulated, and

when receiving the information capsulated, the writing/reading unit decapsulates the information capsulated.

10. (ORIGINAL) The virtualized-information management apparatus according to claim 1, wherein

the transmission/reception unit includes

a capsulating unit that capsulates the information on updating the corresponding information using an internet protocol packet; and

a decapsulating unit that decapsulates capsulated information,

when the network is connected to the another network via internet protocol network, the transmission/reception unit capsulates the information about the updating of the corresponding information, and transmits the information capsulated, and

when receiving the information capsulated, the transmission/reception unit decapsulates

the information capsulated.

11. (ORIGINAL) The virtualized-information management apparatus according to claim 10, wherein

the writing/reading unit includes

a capsulating unit that capsulates the information on updating the corresponding information using an internet protocol packet; and

a decapsulating unit that decapsulates capsulated information,

when the network is connected to the another network via internet protocol network, the writing/reading unit capsulates the information about the updating of the corresponding information, and transmits the information capsulated, and

when receiving the information capsulated, the writing/reading unit decapsulates the information capsulated.

12. (CURRENTLY AMENDED) A method of managing corresponding information between real ~~storage areas~~ volumes of a plurality of storages connected to a network and a virtual ~~storage area~~ volume built by virtually integrating the real ~~storage areas~~ volumes in a virtualized-information management apparatus connected to the network, comprising:

transmitting information on updating the corresponding information to another virtualized-information management apparatus connected to another network;

receiving the information on updating the corresponding information from the another virtualized-information management apparatus; ~~and~~

updating the corresponding information based on the information received;

accepting specifying of a necessary capacity of the virtual volume;

selecting the real volumes connected to networks based on a predetermined priority sequence of the networks until a total free capacity of the real volumes selected reaches the necessary capacity;

building a new virtual volume by virtually integrating the real volumes selected; and

updating the corresponding information based on corresponding information of the new virtual volume.

13. (CURRENTLY AMENDED) A computer program for managing corresponding information between real ~~storage areas~~ volumes of a plurality of storages connected to a network and a virtual ~~storage area~~ volume built by virtually integrating the real ~~storage areas~~ volumes in a virtualized-information management apparatus connected to the network, making a

computer execute:

transmitting information on updating the corresponding information to another virtualized-information management apparatus connected to another network;

receiving the information on updating the corresponding information from the another virtualized-information management apparatus; and

updating the corresponding information based on the information received;

accepting specifying of a necessary capacity of the virtual volume;

selecting the real volumes connected to networks based on a predetermined priority sequence of the networks until a total free capacity of the real volumes selected reaches the necessary capacity;

building a new virtual volume by virtually integrating the real volumes selected; and

updating the corresponding information based on corresponding information of the new virtual volume.

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